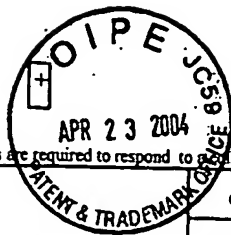


Please type a plus sign (+) inside this box



Approved for use through 10-31-99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

PTO/SB/08A (10-96)

Under the Paperwork Reduction Act of 1995 no persons are required to respond to collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

COMPLETE IF KNOWN

Application Number	10/661,319
Filing Date	September 12, 2003
First Named Inventor	ARMSTRONG, et al.
Group Art Unit	2877
Examiner Name	

Sheet	1	of	15	Attorney Docket Number	37000 CIP2 9906
-------	---	----	----	------------------------	-----------------

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	U.S. Patent Document Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
K.G.		5,249,195		L.C. Feldman, et al.	09/28/1993	
K.G.		5,363,398		A.M. Glass, et al.	11/08/1994	
K.G.		5,527,712	A	T.M. Sheeny	06/18/1996	
K.G.		4,781,458		S.M. Angel, et al.	11/01/1988	
K.G.		4,828,758		G.E. Gillberg-LaForce, et al.	05/09/1989	
K.G.		4,903,272		B. Simic-Glavaski	02/20/1990	
K.G.		4,913,845		G.E. Gillberg-LaForce, et al.	04/03/1990	
K.G.		5,234,758		A.W. Olsen, et al.	08/10/1993	
K.G.		5,237,211		K.T. Carron, et al.	07/05/1994	
K.G.		5,405,710		A. Dodabalapur, et al.	04/11/1995	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Foreign Patent Document Office ³ Number ⁴ Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ⁶
Examiner Signature	<i>Kara Gensel</i>			Date Considered	1/06	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[F:\ANNETTE\NMSUT-Armstrong-p1-1449.PTO.doc] 37000-9906

1. Unique citation designation number. 2. See attached Kinds of U.S. Patent Documents. 3. Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). 4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



Approved for use through 10-31-99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

PTO/SB/08A (10-96)

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	107661,319
				Filing Date	September 12, 2003
				First Named Inventor	Armstrong, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	2	of	15	Attorney Docket Number	37000 CIP2 9906

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	U.S. Patent Document Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
K.G.		5,405,906		A.W. Olsen, et al.	04/11/1995	
K.G.		5,469,018		S.M. Jacobsen, et al.	11/21/1995	
K.G.		5,478,658		A. Dodabalapur, et al.	12/26/1995	
K.G.		5,616,986		S.M. Jacobsen, et al.	04/01/1997	
K.G.		5,674,636		A. Dodabalapur, et al.	10/07/1997	
K.G.		5,853,464		I.A. Macpherson, et al.	12/29/1998	
LEFT INTENTIONALLY BLANK						

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Foreign Patent Document Office ³ Number ⁴ Kind Code ⁵ (if known)	Name of Patentee of Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ⁶
Examiner Signature	Kara G. [Signature]			Date Considered	1/06	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[F:\ANNETTE\NMSUT-Armstrong-1449p2.PTO.doc] 37000UT9906

1. Unique citation designation number. 2. See attached Kinds of U.S. Patent Documents. 3. Enter office that issued the document, by the two-letter code (WIPO Standard ST.3).
4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



Approved for use through 10-31-99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

PTO/SB/08A (10-96)

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN				
				Application Number		10/661,319		
				Filing Date		September 12, 2003		
				First Named Inventor		Armstrong, et al.		
				Group Art Unit		2877		
				Examiner Name				
Sheet	3	of	15	Attorney Docket Number		37000 CIP2 9906		
U.S. PATENT DOCUMENTS								
Examiner Initials	Cite No. ¹	<u>U.S. Patent Document</u> Number Kind Code ² (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
K.G.		5,377,219	A	A.R. Geiger	12/27/1994			
K.G.		5,777,776		T. Hiraga, et al.	07/07/1998			
K.G.		5,847,816	A	M.S. Zediker, et al (Otaguro)	12/08/1998			
K.G.		5,952,655		R.N. Bhargava	09/14/1999			
FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No. ¹	<u>Foreign Patent Document</u> Office ³ Number ⁴ Kind Code ⁵ (if known)			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T 6
K.G.		EP	0 527 551	A1	Hitachi, Ltd.	17.02.1994		
K.G.		WO	91/20078	A1	BASF Aktiengesellschaft	26.12.1991		
Examiner Signature	Kase Geisel				Date Considered	1/06		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[G:\ANNETTE\WMSUT\Armstrong-p3-1449.PTO.doc]

1. Unique citation designation number. 2. See attached Kinds of U.S. Patent Documents. 3. Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). 4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)

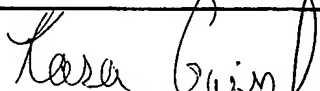
Approved for use through 10-31-99. OMB 0651-003

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661.319
				Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	4	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		V. M. Shalaev, <i>Nonlinear Optics of Random Media: Fractal Composites and Metal-Dielectric Films</i> , Springer Tracts in Modern Physics, v.158, Springer, Berlin Heidelberg 2000.	
K.G.		A. K. Sarychev and V. M. Shalaev, "Field Distribution, Anderson localization, and optical phenomena in random metal-dielectric films," Chapter in: <i>Optics of Nanostructured Materials</i> , Eds: V.A. Markel and T.F. George, Wiley, 2001.	
K.G.		V.M. Shalaev, "Surface-Enhanced Optical Phenomena in Nanostructured Fractal Materials," Chapter in: <i>Handbook of Nanostructured Materials and Nanotechnology</i> , Volume 4: Optical Properties, Edited by H. S. Nalwa, Academic Press, 2000	
K.G.		V. M. Shalaev, V. P. Safonov, E.Y. Poliakov, V. A. Markel, and A. K. Sarychev, "Fractal Surface Enhanced Optical Nonlinearities", Chapter 8: <i>Nanostructured Materials: Clusters, Composites, and Thin Films</i> , Eds; V. M. Shalaev and M. Moskovits, ACS Symposium Series v. 679, ACS Books, 1997	
K.G.		Local Field Distribution in Random Metal-Dielectric Films; Theory and Experiment, Dentsho A. Genov, Katyatani Seal, Mark A. Nelson, Andrey K. Sarychev, Z. Charles Ying, Vladimir M. Shalaev, Physica B 338, Pages 228-231 (2003)	
K.G.		Metal coverage dependence of local optical properties of semicontinuous metal films, K. Seal, M. A. Nelson, Z. C. Ying, D. A. Genov, A. K. Sarychev, and V. M. Shalaev, J. of Modern Optics 49, 2423-2435 (2002).	
K.G.		V. A. Podolskiy, A. K. Sarychev, V. M. Shalaev, "Temporal Dynamics of Local Optical Responses and Sub-fs Pulse Generation in Semicontinuous Metal Films," Laser Physics 12, 292 (2002).	
K.G.		M. Breit, V. A. Podolskiy, S. Gresillon, G. von Plessen, J. Feldmann, J. C. Rivoal, P. Gadenne, A. K. Sarychev, and Vladimir M. Shalaev, <i>Experimental observation of percolation-enhanced non-linear light scattering</i> , Phys. Rev. B 64, 125106 (2001).	

Examiner Signature		Date Considered	1/06
--------------------	---	-----------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[G:\ANNETTE\NMSUT\NMSUT-Armstrong319-1449_p1.doc]

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)

Approved for use through 10-31-99. OMB 0651-003

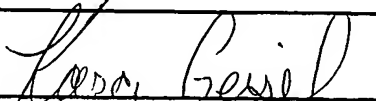
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no

persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	5	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		V. A. Podolskiy, A. K. Sarychev, and Vladimir M. Shalaev, Percolation Composites: Localization of Surface Plasmons and Enhanced Optical Nonlinearities, in Photonic Crystals and Light Localization in the 21st Century, 567, ed. by C. M. Soukoulis (Kluwer Academic Publishers, 2001).	
K.G.		M. Gadenne, V. Podolskiy, P. Gadenne, P. Sheng and V. M. Shalaev, Plasmon-enhanced absorption by optical phonons in metal-dielectric composites, Europhys. Lett. 53, 364 (2001).	
K.G.		V. M. Shalaev and Z. C. Ying, Nonlinear Optics of Surfaces, Encyclopedia of Materials: Science and Technology, ed. by D. D. Nolte (Pergamon, Amsterdam 2000), article 6.8.13	
K.G.		V. A. Shubin, A.K.Sarychev, J. P. Clerc, and V.M.Shalaev, Local Electric And Magnetic Fields In Semicontinuous Metal Films, Phys. Rev. B62, 11230 (2000).	
K.G.		A. K. Sarychev, V. A. Shubin, V. M. Shalaev, Anderson localization of surface plasmons and Kerr nonlinearity in semicontinuous metal Films, Physica B 279, 87 (2000).	
K.G.		A. K. Sarychev, P. C. McPhedran, and V. M. Shalaev, Electrodynamics of metal-dielectric composites and electromagnetic crystals, Phys. Rev. B 62, 8531 (2000).	
K.G.		S. Ducourtieux, S. Gresillon, A. C. Boccard, J. C. Rivoal, X. Quelin, P. Gadenne, V. P. Drachev, W. D. Bragg, V. P. Safonov, V. A. Podolskiy, Z. C. Ying, R. L. Armstrong, and Vladimir M. Shalaev, Percolation and Fractal Composites: Optical Studies, J. of Nonlinear Optical Physics and Materials 9, 105 (2000).	

Examiner Signature		Date Considered	1/06
-----------------------	---	--------------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[G:\ANNETTE\NMSUT\NMSUT-Armstrong319-1449_p2.doc]

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)

Approved for use through 10-31-99. OMB 0651-003

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	
				Examiner Name	
Sheet	6	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		S. Gresillon, L. Aigouy, A. C. Boccaro, J. C. Rivoal, X. Quelin, C. Desmarest, P. Gadenne, V. A. Shubin, A. K. Sarychev, and V. M. Shalaev, Experimental Observation of Localized Optical Excitations in Random Metal-Dielectric Films, Phys. Rev. Lett. 82, 4520 (1999).	
K.G.		W. Kim, V. P. Safonov, V. M. Shalaev, R. L. Armstrong, Fractals in Microcavities: Giant Coupled Multiplicative Enhancement of Optical Responses, Phys. Rev. Lett. 82, 4811 (1999).	
K.G.		A. K. Sarychev, V. A. Shubin, and Vladimir M. Shalaev, Anderson localization of surface plasmons and nonlinear optics of metal-dielectric composites, Phys. Rev. B 60, 16389 (1999).	
K.G.		V. A. Shubin, W. Kim, V. P. Safonov, A. K. Sarychev, R. L. Armstrong, and Vladimir M. Shalaev, Surface-Plasmon-Enhanced Radiation Effects in Confined Photonic Systems, J. of Lightwave Technology 17, 2183 (1999).	
K.G.		E. Poliakov, V. M. Shalaev, V. Shubin, V. A. Markel, Enhancement of nonlinear processes near rough nanometer-structured surfaces obtained by deposition of fractal colloidal aggregates on a plain substrate, Phys. Rev. B 60, 10739 (1999).	
K.G.		N. N. Lepeshkin, W. Kim, V. P. Safonov, J. G. Zhu, R. L. Armstrong, C. W. White, R. A. Zühr, and V. M. Shalaev, Optical Nonlinearities of Metal-Dielectric Composites, J. of Nonlinear Optical Physics and Materials 8, 191 (1999)	
K.G.		Vladimir M. Shalaev and Andrey K. Sarychev, Nonlinear optics of random metal-dielectric films, Phys. Rev. B 57, 13265 (1998).	
K.G.		Kneipp K., et al., "Surface-Enhanced Raman Scattering: A New Tool for Biomedical Spectroscopy," Current Science, Vol. 77, No. 7, pp 915-924 (Oct 10 1999)	

Vla
(19)

Examiner Signature	<i>Kare Gaisl</i>	Date Considered	1/06
--------------------	-------------------	-----------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[G:\ANNETTE\NMSUT\NMSUT-Armstrong319-1449_p3.doc]

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)

Approved for use through 10-31-99. OMB 0651-003

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no

persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	7	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		S. I. Bozhevolnyi, V. A. Markel, V. Coello, W. Kim, and V. M. Shalaev, Direct Observation of Localized Excitations on Rough Nanostructured Surfaces, Phys. Rev. B 58, 11441 (1998).	
		V. M. Shalaev, V. A. Markel, E. Y. Poliakov, R. L. Armstrong, V. P. Safonov, A. K. Sarychev, Nonlinear Optical Phenomena in Nanostructured Fractal Materials, J. Nonlinear Optic. Phys. and Materials, v. 7, 131 (1998).	
		V. M. Shalaev, E. Y. Poliakov, V. A. Markel, R. Botet, Nonlinear optics of fractal nanomaterials: Small-particle composites and self-affine thin films, Physica A 241, 249 (1997).	
		V. M. Shalaev, E. Y. Poliakov, V. A. Markel, R. Botet, E. B. Stechel, Optical properties of self-affine surfaces, in: Fractal Frontiers, Eds: M. M. Novak and T. G. Dewey, World Scientific, Singapore, 1997; p. 421.	
		V. M. Shalaev, E. Y. Poliakov, V. A. Markel, V. P. Safonov, A. K. Sarychev, Surface-Enhanced Optical Nonlinearities of Nanostructured Fractal Materials, Fractals, 5 (suppl.), 63 (1997). No copy available	
		F. Brouers, S. Blacher, A. N. Lagarkov, A. K. Sarychev, P. Gadenne, V. M. Shalaev, Theory of giant Raman scattering from semicontinuous films, Phys. Rev. B 55, 13234 (1997).	
		Vladimir M. Shalaev, E. Y. Poliakov, V. A. Markel, and R. Botet, Nonlinear Optics of Fractal Nanocomposites and Self-Affine Thin Films, Physica A 241, 249 (1997).	
		Vadim A. Markel, Vladimir M. Shalaev, Evgeni Y. Poliakov, Thomas F. George, Fluctuations of light scattered by fractal clusters, J. Opt. Soc. Amer., 14, 60 (1997).	
		Evgeni Y. Poliakov, Vladimir M. Shalaev, Vadim A. Markel, Robert Botet, Enhanced Raman scattering from self-affine thin films, Opt. Lett., 21, 1628 (1996).	
K.G.		Vladimir M. Shalaev, R. Botet, J. Mercer, and E. B. Stechel, Optical properties of self-affine thin films, Phys. Rev. B 54, 8235 (1996).	

Examiner Signature	<i>Kara Reisel</i>	Date Considered	1/06
--------------------	--------------------	-----------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[G:\ANNETTE\NMSUT\NMSUT-Armstrong319-1449_p4.doc]

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)

Approved for use through 10-31-99. OMB 0651-003

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no

persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	8	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		Vladimir M. Shalaev, Mark I. Stockman, and R. Botet, Resonant excitations and nonlinear optics of fractals, Physica A 185, 181 (1992).	
K.G.		Vladimir M. Shalaev, R. Botet, and R. Jullien, Erratum: Resonant light scattering by fractal clusters, Phys. Rev. B 45, 7592. (1992).	
K.G.		Vladimir M. Shalaev, R. Botet, and R. Jullien, Resonant light scattering by fractal clusters, Phys. Rev. B 44, 12216 (1991).	
K.G.		A.V. Butenko, P.A. Chubakov, Yu.E. Danilova, S.V. Karpov, A.K. Popov, S.G. Rautian, V.P. Safonov, V.V. Slabko, V.M. Shalaev, and M.I. Stockman, Nonlinear optics of metal fractal clusters, Z.Phys.D- Atoms, Molecules, and Clusters 17, 283 (1990).	
K.G.		P. Gadenne, B. Berini, S. Buil, X. Quelin, S. Gresillon, S. Ducourtieux, J. C. Rivoal, A. K. Sarychev, V. M. Shalaev, Localized plasmon-enhanced optical response: harmonic generation and polarization effects, Proceeding of SPIE's 46 Annual Meeting v. 4467, 288 (2001).	
K.G.		S. Gresillon, S. Ducourtieux, L. Aigouy, A. C. Boccara, J. C. Rivoal, P. Gadenne, X. Quelin, V. M. Shalaev, V. A. Shubin, Optical excitations of semicontinuous metal films, COLOQ6, 7-9 September, Bordeaux, France.	
K.G.		Vladimir M. Shalaev, Nonlinear Optics of Random Nanostructured Materials: Composites, Clusters, and Thin Films, XVI International Conference on Coherent and Nonlinear Optics (Moscow, Russia, June 29-July 3, 1998), ICONO.98 Technical Digest, URSS Publishers, p. 100 (1998).	
K.G.		V. M. Shalaev and A. K. Sarychev, Nonlinear Optics of Random Metal-Dielectric Films, in Nonlinear Optics.98. Materials, Fundamentals and Applications. Topical Meeting. Kauai, Hawaii, 10-14 August, 1998 IEEE Catalog Number 98CH36244, p. 22 (1998).	
K.G.		V. M. Shalaev, Fractal-surface-enhanced optical nonlinearities, Technical Digest of the Quantum Electronics and Laser Science Conference, QELS.97, Baltimore, May 18-23, 1997, 1997 OSA Technical Digest Series, v. 12, p. 88.	
K.G.		E. Poliakov, V. M. Shalaev, Nonlinear Optical Effects in Fractal Nanostructured Materials such as Nanocomposites and Self-Affine Surfaces, Chemistry and Physics of Small-Scale structures, Technical Digest Series, v. 2, Santa Fe, February 9-11, 1997; p. 49	

Examiner Signature	<i>Kara Gause</i>	Date Considered	1/06
--------------------	-------------------	-----------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[G:\ANNETTE\NMSUT\NMSUT-Armstrong319-1449_p5.doc]

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)

Approved for use through 10-31-99. OMB 0651-003

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no

persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	9	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		R. L. Armstrong, V. P. Safonov, N. N. Lepeshkin, W. Kim, and V. M. Shalaev, Giant optical nonlinearities of fractal colloid aggregates, SPIE, San Diego, p. 107, 1997	
		Vladimir M. Shalaev, Giant Optical Nonlinearities in Fractal Nanostructured Composites, Technical Digest, XX International Quantum Electronics Conference, Sydney (1996).	
		Vladimir M. Shalaev, J. Mercer, V.P. Safonov, and R. Botet, Nonlinear Optics of Fractal Nanocomposites and Self-Alline Surfaces, Technical Digest of Summer Topical Meeting, Nonlinear Optics: Materials, Fundamentals, and Applications, Maui, Hawaii, (1996).	
		V.A. Markel, E.B. Stechel, W. Kim, R. Armstrong, and Vladimir Shalaev, Optical Properties of fractal nanocomposites, Mat.Res.Soc Symp.Proc. vol.367, 417 (1995).	
		Vladimir Shalaev, R. Botet, M. Moskovits, Subwavelength localization of optical modes in fractals, In: Molecular Designed Ultrathin Nanostructured Materials, Mat.Res.Soc Symp.Proc. vol.351, 449 (1994).	
		A.V. Butenko, V.A. Markel, L.S. Muratov, V.M. Shalaev, and M.I. Stockman, Theory and Numerical Simulations of Optical Properties and Selective Photomodification of Fractal Clusters, Proc. X International Vavilov Conference on Nonlinear Optics; in: Nonlinear Optics, edited by S.G. Rautian, Nova Science Publishers, 275 (1992).	
		Yu.E. Danilova, S.V. Karpov, A.K. Popov, S.G. Rautian, V.P. Safonov, V.V. Slabko, V.M. Shalaev, and M.I. Stockman, Experimental Investigation of Optical Nonlinearities of Silver Fractal Clusters, Proc. X International Vavilov Conference on Nonlinear Optics; in: Nonlinear Optics, edited by S.G. Rautian, Nova Science Publishers, 295 (1992).	
		A.V. Butenko, P.A. Chubakov, Yu.E. Danilova, S.V. Karpov, A.K. Popov, S.G. Rautian, V.P. Safonov, V.V. Slabko, V.M. Shalaev, M.I. Stockman, Nonlinear Optics of Metal Fractal Clusters, in: Proc. International School on Lasers and Applications, Sayanogorsk, Eastern Siberia, USSR; Published by Institute for Physics, USSR Academy of Sci., Krasnoyarsk, 78 (1991).	
K.G.		V.M. Shalaev, M.I. Stockman, Optical properties of fractal clusters, Proc. 3-rd Int. Conf.Trends in Quantum Electronics., Romania, 201 (1988).	
		Left Intentionally Blank	
		Left Intentionally blank	
		Left Intentionally Blank	

Examiner Signature	<i>Kara Gossel</i>	Date Considered	1/06
--------------------	--------------------	-----------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[G:\ANNETTEN\MSUT\NMSUT-Armstrong609-1449_p6.doc]

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



Approved for use through 10-31-99. OMB 0651-003

PTO/SB/08B (10-96)

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no

persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	Armstrong, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	10	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		BISWAS, A., et al., "Time-Resolved Spectroscopy of Laser Emission from Dye-doped Droplets," <i>Optics Letters</i> , Vol. 14, No. 4, pp 214-216 (February 15, 1989)	
		BOYD, R.W., et al., "Nonlinear Optical Properties of Nanocomposite Materials," <i>Pure Appl. Opt.</i> , Vol. 5, pp 505-512 (1996)	
		CHANG, R.K., et al., TEXTBOOK: "Optical Processes in Microcavities," <i>World Scientific</i> , Singapore-New Jersey-London-Hong Kong (1996) Table of Contents for reference	
		CHANG, R.K., et al. TEXTBOOK: "Surface Enhanced Raman Scattering," <i>Plenum Press</i> , New York - London (1982) Table of Contents for reference	
		CHINN, S.R., "Analysis of Counter-Pumped Small-Signal Fiber Raman Amplifiers," <i>Electronics Letters</i> , vol. 33, No. 7, pp 607-608 (March 27, 1997)	
		KERKER, M., et al., "Surface Enhanced Raman Scattering (SERS) of Citrate Ion Adsorbed on a Colloidal Silver," <i>Applied Optics</i> , Vol. 19, No. 19, pp 3253-3255 (October 1, 1980)	
		KNEIPP, K., et al., "Single Molecule Detection Using Surface-Enhanced Raman Scattering (SERS)," <i>Physical Review Letters</i> , Vol. 78, No. 9, pp 1667-1970, (March 3, 1997)	
		LEE, P.C., et al., "Adsorption and Surface-Enhanced Raman of Dyes on Silver and Gold Sols," <i>J. Phys. Chem.</i> , vol. 86, pp 3391-3395 (1982)	
		LIN, H.B., et al., "cw Nonlinear Optics in Droplet Microcavities Displaying Enhanced Gain," <i>Phys. Rev. Letters</i> , vol. 73, No. 18, pp 2440-2443 (October 31, 1994)	
K.G.		MARKEL, V.A., et al., "Small-Particle Composites. I. Linear Optical Properties," <i>Phys. Review B</i> , Vol. 53, No. 5, pp 2425-2436 (February 1, 1996)	

Examiner Signature	<i>Kara Geisel</i>	Date Considered	1/06
--------------------	--------------------	-----------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[F:\ANNETTE\NMSUT-Armstrong-1449p3.PTO.doc] 37000-9906

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)
Approved for use through 10-31-99. OMB 0651-003
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	Armstrong, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	11	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		MARKEL, V.A., "Theory and Numerical Simulation of Optical Properties of Fractal Clusters," <i>Phys. Rev. B</i> , Vol. 43, No. 10, pp 8183-8195 (April 1, 1991)	
		MOSKOVITS, M., "Surface-Enhanced Spectroscopy," <i>Rev. Mod. Phys.</i> , Vol. 57, No. 3, Part I, pp 783-826 (July 1985)	
		NIE, S., et al., "Probing Single Molecules and single Nanoparticles by Surface-Enhanced Raman Scattering," <i>Science</i> , Vol. 275, pp 1102-1106 (February 21, 1997)	
		OWEN, J.F., et al., "Enhancement of Fluorescence Induced by Microstructure Resonances of a Dielectric Fiber," <i>Phys. Rev. Letters</i> , Vol. 47, No. 15, pp 1975-1078 (October 12, 1981)	
		PRASLER, M.A., et al., TEXTBOOK: "Near-Field Optics: Theory, Instrumentation, and Applications," <i>Wiley-Interscience Publication</i> , John Wiley & Sons, Inc., New York (1996) Table of Contents for reference	
		RAUTIAN, S.G., et al., "Surface-Enhanced Parametric Scattering of Light by Silver clusters," <i>JETP Lett.</i> , Vol. 47, No. 4, pp 243-246 (February 25, 1988)	
		RITCHIE, G., et al., "Luminescence of Dye Molecules Adsorbed at a Ag Surface," <i>Phys. Rev. B</i> , Vol. 24, No. 8, pp 4843-4846 (October 15, 1981)	
		SAFONOV, V.P., et al., "spectral Dependence of Selective Photomodification in Fractal Aggregates of Colloidal Particles," <i>Phys. Rev. Lett.</i> , Vol. 80, No. 5, pp 1102-1105 (February 2, 1998)	
		SHALAEV, V.M., et al., "Optical Properties of Fractal Clusters (susceptibility, Surface Enhanced Raman Scattering by Impurities)," <i>Sov. Phys. JETP</i> , Vol. 65, No. 2, pp 287-294 (February 1987)	
K.G.		SHALAEV, V.M., et al., "Electromagnetic Properties of Small-Particle Composites," <i>Phys. Reports</i> , vol. 272, pp 61-137 (1996)	

Examiner Signature	<i>Kasa Gessel</i>	Date Considered	1/06
--------------------	--------------------	-----------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
(F:\ANNETTE\NMSUT-Armstrong-1449B4.PTO.doc) 37000-9906

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)
Approved for use through 10-31-99. OMB 0651-003
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no

persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	Armstrong, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	12	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		SHALAEV, V.M., "Nonlinear Optical Phenomena in Nanostructured Fractal Materials," <i>J. Nonlinear Op. Phys. & Mat.</i> , vol. 7, No. 1, pp 131-152 (1998)	
		SHALAEV, V.M., et al., "Small Particle Composites. II Nonlinear Optical Properties," <i>Phys. Rev. B</i> , Vol. 53, No. 5, pp 2437-2449 (February 1, 1996)	
		SILMAN, O., et al., "Surface-Enhanced Raman Scattering by Citrate on Colloidal Silver," <i>J. Phys. Chem.</i> , vol. 87, pp 1014-1023 (1983)	
		STOCKMAN, M.I., "chaos and spatial Correlations for Dipolar Eigenproblems," <i>Phys. Rev. Lett.</i> , Vol. 79, No. 23, pp 4562-4565 (December 8, 1997)	
		TZENG, H.M., et al., "Laser emission from Individual Droplets at Wavelengths Corresponding to Morphology-Dependent Resonances," <i>Optics Lett.</i> , Vol. 9, No. 11, pp 499-501 (November 1984)	
		YARIV, A., TEXTBOOK: "Quantum Electronics", Third Edition, <i>John Wiley & Sons</i> , New York, pp 466-467 and Table of Contents for reference (
K.G.		Xu, X-H, et al., "Direct Measurement of single-Molecule Diffusion and Photodecomposition in Free Solution," <i>Science</i> , Vol. 275, pp 1106-1109 (February 21, 1997)	
		LEFT INTENTIONALLY BLANK	

Examiner Signature		Date Considered	1/06
--------------------	--	-----------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[F:\ANNETTE\NMSUT-Armstrong-1449p5.PTO.doc] 37000-9906

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)

Approved for use through 10-31-99. OMB 0651-003

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no

persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	Armstrong, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	13	of	15	Attorney Docket Number	37000 CIP2, 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		BERGER, A.J., et al., "Feasibility of Measuring Blood Glucose Concentration by Near-Infrared Raman Spectroscopy," <i>Spectrochimica Acta Part A</i> Vol.53, pp 287-292 (1997)	
		CAREY, P.R., "Raman Spectroscopy, the Sleeping Giant in Structural Biology, Awakes," <i>J Biol. Chem.</i> , Vol. 274, No. 38, pp 26625-26628 (Sep 17,1999)	
		ANDREWS, M.P., et al., "Integrated Optics Waveguide Spectroscopy of Self-Organizing Polymers and Fractal Composites," <i>Proc of SPIE</i> , Vol. 2042, pp 366-376 (1994)	
		McNICHOLS R.J., et al., <i>J of Biomedical Optics</i> , Vol.5(#1), pp 3-16 (January 2000) (internet printout provided)	
		McMAKIN, A., "Infrared Fruit-Tester Bounces Bad Apples," <i>Northwest Sci &Tech</i> , pp29-3- (Winter 2001)	
		PAPPAS, D., et al., "Raman Spectroscopy in Bioanalysis," <i>Talanta</i> , Vol. 51, pp 131-144 (2000)	
		PELLETIER, M., et al., "Keep Your Process in Control," <i>Photonics Spectra</i> , pp92-6 (Sep 2000)	
		STORRIE-LOMBARDI, M., et al., "Determining Glucose Levels from NIR Raman Spectra of Eyes," <i>NASA JPL New Technology Report NPO-204-14</i> pg 1 and 1a-9a (Apr 2000)	
		SULK R., et al., "Surface-Enhanced Raman Assays (SERA): Measurement of Bilirubin and Salicylate," <i>J. Raman Spectrosc.</i> , Vol. 30 pp 853-859 (1999)	
		THOMAS, G.A., et al., "Physics in the Whirlwind of Optical Communications," <i>Physics Today</i> , pp30-33 (Sep 2000)	
		TEXAS A & M U., "Raman Spectroscopy for Analyte Detection" from http://biomed.tamu.edu/obs/rs-analyte.htm (8/28/00)	
K.G.		WEBER, W.H., "Raman Scattering Becomes More Accessible," <i>Amer Inst of Phys</i> .pp 12/14 (Oct 2000)	

Examiner Signature		Date Considered	11/06
--------------------	--	-----------------	-------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)

Approved for use through 10-31-99. OMB 0651-003

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no

persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	14	of	15	Attorney Docket Number	37000 CIP2 9906
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
K.G.		BURSTEIN, E., et al., Editors, CONFINED ELECTRONS AND PHOTONS, Textbook published by Plenum Press (NY and London), from Proceedings of a NATO Advanced Study Institute on Confined Electrons and Photons: New Physics and Applications, held July 13-26, 1993, Erice, Italy (1995 Plenum Press New York)			
		ARMSTRONG, R.L., "Nonlinear Optical Effects in Microcylinders and Microdroplets," TEXTBOOK, r.k. Chang and A.J. Campillo (eds); Opticdal Processes in Microcavities (1996) World Scientific, Singapore pp 257-283			
		SHIBATA, S., et al., "Preparation of Silica Microspheres Containing AG Nanoparticles," <i>J of Sol-Gel Sci and Tech</i> , Kluwer Academic Publ, Dordrecht, NL Vol 11, No. 3 pp 279-287 (8/1/1998)			
		WANG, H.Z., et al., "Low-Threshold Lasing of A. Rhodamine Dye Solution Embedded with Nanoparticles Fractal Agreegates," <i>Optics Letters</i> , Optical Society of America, Washington US, Vol. 23, No. 10, pp 777-779 (15 May 1998)			
		KUROKAWA Y., et al., "Surface-Enhanced Raman Spectroscopic Detection of Carbonate, Sulfite, and Nucleic Acid Bases Using Polyvinyl Alcohol Film Doped with Silver Fine Particles," <i>Analytical Biochemisty</i> , Vol. 209, No. 2, pp 247-250 (1993)			
		KIM, W., et al., "Fractals in Microcavities: Giant Coupled, Multiplicative Enhancement of Optical Responses," <i>Phys. Review Letters</i> , 14 June 1999, PAS, USA, Vol. 82, No. 24, pp 4811-4814			
		SHUBIN, V.A., et al., "Surface-Plasmon-Enhanced Radiation Effectts in Confined Photonic Systems," <i>J of Lightwave Technology</i> , IEEE, New York US, Vol. 17, No. 11 (pp 2183-2190 (11/1999)			
		RAHM, S., "Performance of an Optical Detector Preamplifier," <i>Optics Letters</i> , Vol. 18, No. 18, Sep 15 1993			
K.G.		PURCELL, E.M., "Spontaneous Emission Probabilities at Radio Frequencies," <i>Physical Review</i> , Vol. 69, No. 11-12 page 681 and whole document (June 1-5, 1946)			
Examiner Signature	Kase Gensh			Date Considered	1/06

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[VDMDOCS\ANNETTE\MSUT-Armstrong-p2-1449.PTO.doc] 37000-9906

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box



PTO/SB/08B (10-96)

Approved for use through 10-31-99. OMB 0651-003

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no

persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				COMPLETE IF KNOWN	
				Application Number	10/661,319
				Filing Date	September 12, 2003
				First Named Inventor	Armstrong, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	15	of	15	Attorney Docket Number	37000 CIP2 9906

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
K.G.		ARNOLD, S., et al., "Room-Temperature Microparticle-Based Persistent Spectral Hole Burning Memory," <i>Optics Letters</i> , Vol. 16, No. 6 pp 420-422 (March 16, 1991)	
		EMORY, S.R., et al., "Near-Field Surface-Enhanced Raman Spectroscopy on Single Silver Nanoparticles," <i>Anal. Chem.</i> , Vol. 69, pp 2631-2635 (1997)	
		OKAMOTO, S., et al., "Persistent Spectral Hole-Burning in CuCl Nanocrystals: Demonstration of Optical Data Storage," <i>Japanese J. Appl. Phys.</i> , Vol. 34, pp 128-130, Suppl 34-1 (1995)	
		SHARP, S.L., et al., "spectroscopy and Imaging Using the Photon Scanning-Tunneling Microscope," <i>Acc. Chem. Res.</i> , Vol. 26, p 377-382 (1993)	
		TSAL, D.P., et al., "Photon Scanning Tunneling Microscopy Images of Optical Excitations of Fractal Metal Colloid Clusters," <i>Phys. Rev. Letters</i> , Vol. 72, No. 26, pp 4149-4152 (June 27, 1994)	
		VO-DINH, T., et al., "Surface-Enhanced Raman Optical Data Storage: A New Optical Memory with Three-Dimensional Data Storage," <i>Rev. of Sci Instr.</i> , Vol. 65, No. 12, pp 3766-3770 Dec 1994)	
		VO-DINH, T., "Surface-Enhanced Raman Spectroscopy Using Metallic Nanostructures," <i>Trends in Analytical Chemistry</i> , Vol. 17, Nos. 8+9, pp 557-582 (1998)	
		ZEISEL, D., et al., "Near-Field Surface-Enhanced Raman Spectroscopy of Dye Molecules Adsorbed on Silver Island Films," <i>Chem. Phys. Letters</i> , Vol. 283, pp 381-385 (Feb 13, 1998)	
K.G.			

Examiner Signature		Date Considered	1/06
--------------------	--	-----------------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[G:\ANNETT\NM-Armstrong-1449p2.PTO.doc]

¹ Unique citation designation number. 2. Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/661,319
Filing Date	September 12, 2003
First Named Inventor	Armstrong, Robert
Group Art Unit	2877
Examiner Name	Unknown
Attorney Docket No: NMSUT-Armstrong CIP2	

Sheet 1 of 1

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
K.G.	US-6538794B1	03/25/2003	D'Aguanno, Guiseppe, et al.	
K.G.	US-6597492B1	07/22/2003	Rosenman, Gil, et al.	
K.G.	US-6,791,736	09/14/2004	Jain, Ajaykumar R.	
K.G.	US-6,795,198	09/21/2004	Fuchs, Martin, et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
--------------------	---------------------	------------------	---	---	----------------

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
--------------------	----------------------	---	----------------

G:\ANNETTENMSUT-Armstrong319_1449_FIP.PTO.doc

EXAMINER

DATE CONSIDERED

1/06

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached